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| APPLICATION NO. | FILING DATE | FIRST NAMED INVENTOR | ATTORNEY DOCKET NO. | CONFIRMATION NO. |
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| 10/707,022 | 11/14/2003 | Philip F. Sullivan | 56.0756 | 1021 |

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| EXAMINER | |
|---|---|
| FULLER, BRYAN A | |

| ART UNIT | PAPER NUMBER |
|---|---|
| 3676 | |

DATE MAILED: 08/16/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

| Office Action Summary | Application No. | Applicant(s) | |
|---|---|---|---|
| | 10/707,022 | SULLIVAN ET AL. | |
| | Examiner | Art Unit | |
| | Bryan A. Fuller | 3676 | |

*-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --*

**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

1)☒ Responsive to communication(s) filed on *18 July 2005*.

2a)☐ This action is **FINAL**. 2b)☒ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

4)☒ Claim(s) *1 - 31* is/are pending in the application.

4a) Of the above claim(s) *30 - 31* is/are withdrawn from consideration.

5)☐ Claim(s) _____ is/are allowed.

6)☒ Claim(s) *1-28* is/are rejected.

7)☒ Claim(s) *29* is/are objected to.

8)☒ Claim(s) *1-31* are subject to restriction and/or election requirement.

**Application Papers**

9)☐ The specification is objected to by the Examiner.

10)☐ The drawing(s) filed on _____ is/are: a)☐ accepted or b)☐ objected to by the Examiner.

Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11)☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

**Priority under 35 U.S.C. § 119**

12)☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

a)☐ All b)☐ Some * c)☐ None of:

1.☐ Certified copies of the priority documents have been received.

2.☐ Certified copies of the priority documents have been received in Application No. _____.

3.☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

**Attachment(s)**

1) ☒ Notice of References Cited (PTO-892)
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3) ☒ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08) Paper No(s)/Mail Date *11/14/03, 3/14/05*. 7/18/05
4) ☐ Interview Summary (PTO-413) Paper No(s)/Mail Date. _____ .
5) ☐ Notice of Informal Patent Application (PTO-152)
6) ☐ Other: _____.

## DETAILED ACTION

### *Election/Restrictions*

1. Restriction to one of the following inventions is required under 35 U.S.C. 121:

   I. Claims 1 - 29, drawn to a method of causing a screenout in a subterranean formation stimulation treatment, classified in class 166, subclass 300.

   II. Claims 30 - 31, drawn to a viscoelastic well treatment composition, classified in class 507, subclass 219.

2. The inventions are distinct, each from the other because: Inventions II and I are related as product and process of use. The inventions can be shown to be distinct if either or both of the following can be shown: (1) the process for using the product as claimed can be practiced with another materially different product or (2) the product as claimed can be used in a materially different process of using that product (MPEP § 806.05(h)). In the instant case the product can be used in other well drilling operations.

3. Because these inventions are distinct for the reasons given above and have acquired a separate status in the art as shown by their different classification, restriction for examination purposes as indicated is proper.

4. During a telephone conversation with Thomas Mitchell on 8/3/2005 a provisional election was made with out traverse to prosecute the invention of Group I claims 1 - 29. Affirmation of this election must be made by applicant in replying to this Office action.

Claims 30 - 31 are withdrawn from further consideration by the examiner, 37 CFR 1.142(b), as being drawn to a non-elected invention.

### *Claim Objections*

5. Claim 29 recites the limitation "the pad fluid" in lines 1 and 2 in claim 29. There is insufficient antecedent basis for this limitation in the claim.

6. Claims 27 and 28 are objected to because of the following informalities: They are dependent from claim 25. It appears that they should be dependent from claim 26. The application has been examined as if claims 27 and 28 are dependent from claim 26. Appropriate correction is required.

### *Claim Rejections - 35 USC § 102*

7. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

> A person shall be entitled to a patent unless –
>
> (b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

8. Claims 1 – 4, 6 – 21, 23 – 26, and 28 – 29 are rejected under 35 U.S.C. 102(b) as being anticipated by Johnson et al (5,325,921).

With respect to claims 1, 17, 26, and 28: Johnson et al teaches in column 1, line 7 – column 12, line 44 a method of causing a screenout in a subterranean formation stimulation treatment comprising injecting a slurry of a proppant in a viscoelastic surfactant based carrier fluid above fracturing pressure more fractures, comprising the

steps of: a) injecting a pad fluid that forms a filter cake, b) injecting one or more first slurry stages comprising a proppant in a carrier fluid; and c) degrading the filter cake with a filter cake degradation agent while injecting one or more second slurry stages comprising a proppant in a carrier fluid. The reference also teaches that wells can be gravel packed with these fluids. Additionally, the reference teaches that a sand control screen is in place before the treatment.

With respect to claims 2 – 4 and 23 - 25: Johnson et al teaches in column 4, line 34 – column10, line 8 wherein the degradation agent can be added during the entire treatment, to the pad fluid, to the first stage, to the second slurry stage, or it can be the carrier fluid.

With respect to claims 6 and 18: Johnson et al teaches in column 5, lines 45 – 67 wherein the filter cake degradation agent is a base.

With respect to claim 7: Johnson et al teaches in column 5, lines 45 – 67 wherein the base is selected from the group consisting of alkali metal alkoxides, alkali metal carbonates, alkali metal bicarbonates, alkali metal hydroxides, ammonium hydroxide, and mixtures thereof.

With respect to claim 8: Johnson et al teaches in column 5, lines 45 – 67 wherein the filter cake comprises a fluid loss additive selected from the group consisting of water-soluble polymers, crosslinked water-soluble polymers, asbestos, starch, calcium carbonate, mica, plastic particles, solid wax, wax-polymer particles, insoluble salts, slowly soluble salts, and mixtures thereof, provided that at least one component can be broken or dissolved.

With respect to claims 9 and 10: Johnson et al teaches in column 9, lines 14 – 52 wherein the solid base-soluble material comprises polyglycolic acid.

With respect to claims 11 and 12: Johnson et al teaches in column 5, lines 45 – 67 wherein the solid acid-reactive selected from the group consisting of magnesium hydroxide, magnesium carbonate, magnesium calcium carbonate, calcium carbonate, aluminum hydroxide, calcium oxalate, calcium phosphate, aluminum metaphosphate, sodium zinc potassium polyphosphate glass, and sodium calcium magnesium polyphosphate glass.

With respect to claims 13 - 15: Johnson et al teaches in column 5, lines 45 – 67 wherein particles of the solid base-soluble material are physically mixed with particles of the solid acid-reactive material, wherein the solid base-soluble material is in the same particle as the solid acid-reactive material, or wherein the solid acid-reactive base-soluble material is surrounded by the solid base-soluble material.

With respect to claims 16: Johnson et al teaches in column 8, lines 33 – 40 wherein the solid base-soluble material surrounding the solid acid-reactive material is coated with a hydrolysis-delaying material.

With respect to claims 19 - 21: Johnson et al teaches in column 5, lines 45 – 67 and in column 9, lines 14 – 52 wherein the pad fluid, one or more first slurry stages, or one or more second slurry stages comprises a member of the group consisting of solid base-soluble materials, fluid loss additives, filter cake degradation agents, and mixtures thereof.

***Claim Rejections - 35 USC § 103***

9. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

> (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

10. Claim 5 is rejected under 35 U.S.C. 103(a) as being unpatentable over Johnson et al in view of Zhou et al (US 2004/0221989).

With respect to claim 5: Johnson et al teaches the features as previously claimed except for the use of a buffer in the carrier fluid. Zhou et al teaches in paragraph [0095] the use of a buffer in a carrier fluid. Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to have modified Johnson et al's invention by using a buffer in the carrier fluid in view of Zhou et al. The motivation for this combination is that a buffer can delay the process being applied.

11. Claims 22 and 27 are rejected under 35 U.S.C. 103(a) as being unpatentable over Johnson et al in view of James et al (5,782,300).

With respect to claims 22 and 27: Johnson et al teaches the features as previously claimed except for the use of a bridging-promoting material. James et al teaches in column 2, lines 20 - 46 the use of a bridging-promoting material. Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to have modified Johnson et al's invention by using a bridging-promoting

material in view of James et al. The motivation for this combination is that the bridging-promoting material inhibits solids and particle transport or flowback.

***Conclusion***

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Bryan A. Fuller whose telephone number is (571) 272-8119. The examiner can normally be reached on M - Th 7:30 - 5:00 and alternate Fridays.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Brian E. Glessner can be reached on (571) 272-6843. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

Brian E. Glessner
Supervisory Patent Examiner
Art Unit 3676

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